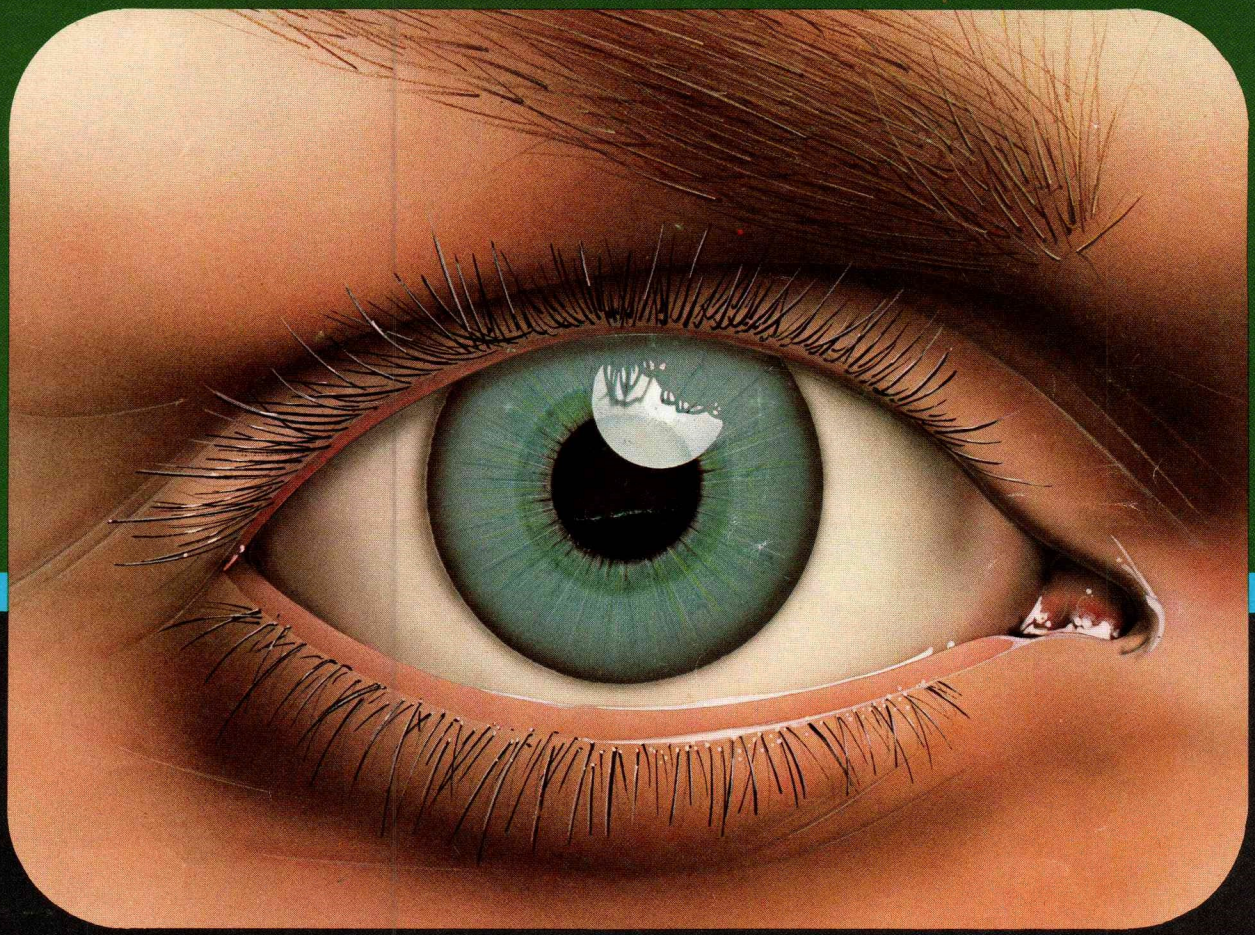
RCA

SelectaVision
Video Monitor

Owner's Manual



WARRANTY REGISTRATION

The model number and serial number of your set can be found on the set's back panel or on the warranty registration. Its a good idea to record both of them in the space provided in the event the set is stolen or if you should need a complete description for any other reason. You can also tape your sales slip and warranty registration to this booklet and file them in a safe place for future reference. You must be able to show your warranty registration or evidence of purchase date to your RCA Authorized Servicenter to obtain warranty parts or service.

Warranty registration of your SelectaVision Video Monitor ensures that you will be contacted should there be a safety inspection, modification, or product recall under applicable laws or regulations or otherwise. Your RCA dealer should have registered your set and given you the customer's copy of the registration. If you did not receive your copy or it was not filled out, contact him promptly. You should have accurate information.

RCA Warranty Registration

Model Number: V G M 2 0 0 5 R

Serial Number: 1 1 0 3 4 0 0 9 4

Date of Sale: 0 3 (Month) 1 1 (Day) 8 2 (Year)

Customer: JOHN DOE

Address: 1000 MAIN

City: MIDTOWN, State: IOWA, Zip: 52307

Dealer: Z TV
CENTER STREET
MIDTOWN, IOWA
52307
RCA Consumer Electronics

RCA

5400JM5 Customer Copy

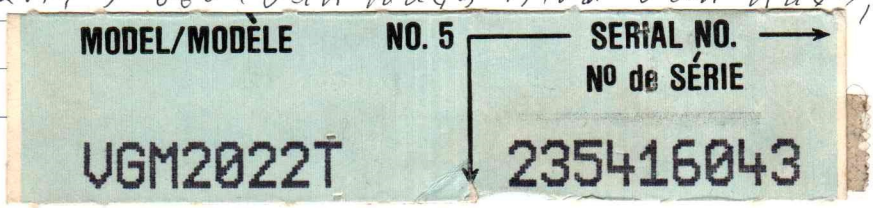
SAMPLE

Purchase date 12/01/82

Dealer ADRAY'S 6609 Van Nuys Blvd Van Nuys, CA 91405

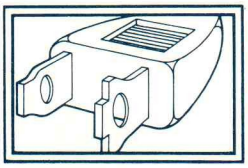
Model

Serial number



SAFETY PRECAUTIONS

Your SelectaVision Video Monitor is designed to operate on 120 volts, 60 Hertz AC power (normal house power) and, as required by Underwriters Laboratories, is equipped with a power cord which has a polarized plug. One blade of the plug is wider than the other and it will fit into the wall socket only one way. If the blades cannot be inserted into your existing wall socket, try reversing the plug. Some older outlets will not accept polarized plugs and should be replaced by a qualified electrician. If you need an extension, use a polarized cord.



Mise en garde: Por prévenir les chocs électriques, ne pas utiliser la fiche polarisée de cet appareil avec une rallonge, une prise de courant ou une autre sortie, à moins que les lames ne puissent être insérées à fond sand qu'aucune partie ne soit laissée à découvert.

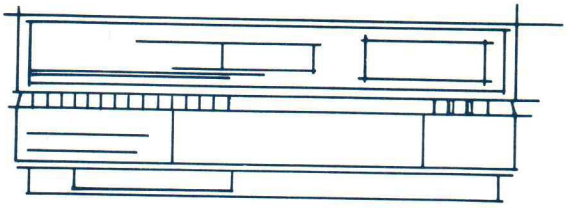
WARNING: To prevent fire or shock hazard, do not expose this Television Monitor to rain or moisture.

Should liquid accidentally be spilled into the Monitor's cabinet, have it checked by a service technician before operating it again.

©RCA Corporation

TECHNOLOGY WITH VISION

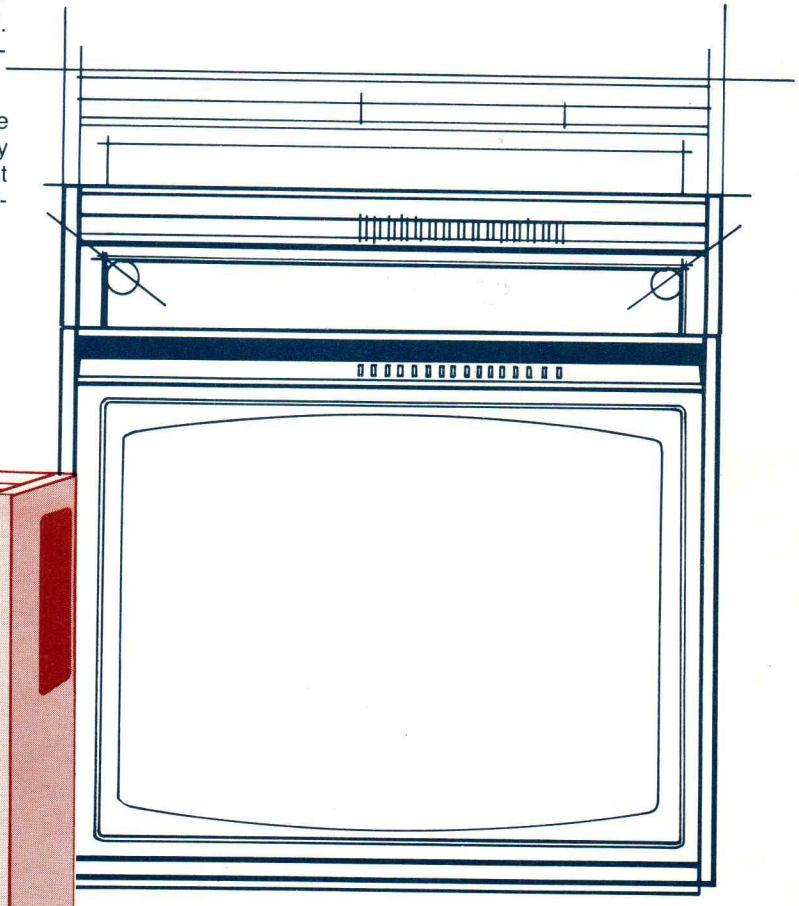
An idea. An innovative concept. An advanced-design product combining "leading edge" television technology with practical, versatile convenience features. The SelectaVision Video Monitor is a unique television instrument which incorporates the best features of a quality television receiver with the color fidelity and picture detail characteristics of a precision video monitor. In a single word, SelectaVision's ***technology with vision*** is "performance".

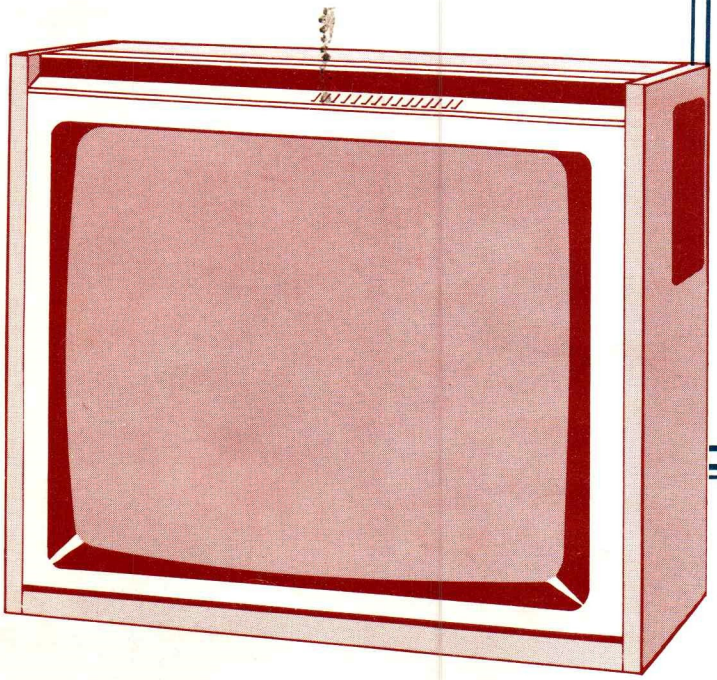


Your new Video Monitor is actually two high-performance instruments in one. As a receiver, it provides premium reception and reproduction of broadcast signals. As a Monitor, it enhances the performance of peripheral video products including Video Cassette Recorders, VideoDisc players, and TV games.

As the centerpiece of your home entertainment center, the Monitor offers a unique menu of features. Simultaneous interconnection of multiple components. Direct pushbutton tuning access to broadcast or cable channels and external video equipment. Exquisite color reproduction and image enhancement. Sophisticated chassis circuitry. And human engineering of control systems to maximize the flexibility of your system.

Nothing proves the value of conceptual design and qualitative engineering as much as a product's performance. With every button you press, your SelectaVision Video Monitor will prove that it is a finely-crafted precision television instrument . . . truly representative of ***technology with vision.***





RCA

TABLE OF CONTENTS

This Owner's Manual contains detailed descriptions of the features and functions of your new Monitor, suggestions for connecting and operating other video and audio products, and complete instructions for operation of the various features. We ask that you read it carefully to obtain the best possible performance. In addition, this Manual contains your RCA Limited Warranty which explains what we promise to do should any operational problem occur. After your initial use of the Manual, please keep it in a safe place for future reference.

Warranty Registration 1
Safety Precautions 1
Technology with Vision 2
The Components Concept 4
Features as a Receiver 5
Features as a Monitor 6
Installation (antenna connection) 7
Antenna Connection to External Video Sources 8
Location and Use of Controls 9
Control Functions 9
Remote Control 10
Operation and Adjustments 11
Programming the Tuner's Memory 11
Cable TV Operation 12
Stereo/Dual Dimension Sound 12
Connecting External Components 13
Signal Flow Diagram 13
Video/Audio Connections:
- Monitor + VCR + Monaural VideoDisc Player 14
- Monitor + VCR + Stereo VideoDisc Player 15
- Monitor + VCR + Camera 15
- Dubbing/Editing Programs 16
- Bridging Signal to Several Monitors 17
- Surveillance Systems 17
- Connecting a Stereo Amplifier 18
- Connecting External Speakers 18

Common Sense Precautions 19
Design Specifications 19
Troubleshooting 20
Reference Notes 21
Your RCA Limited Warranty 22

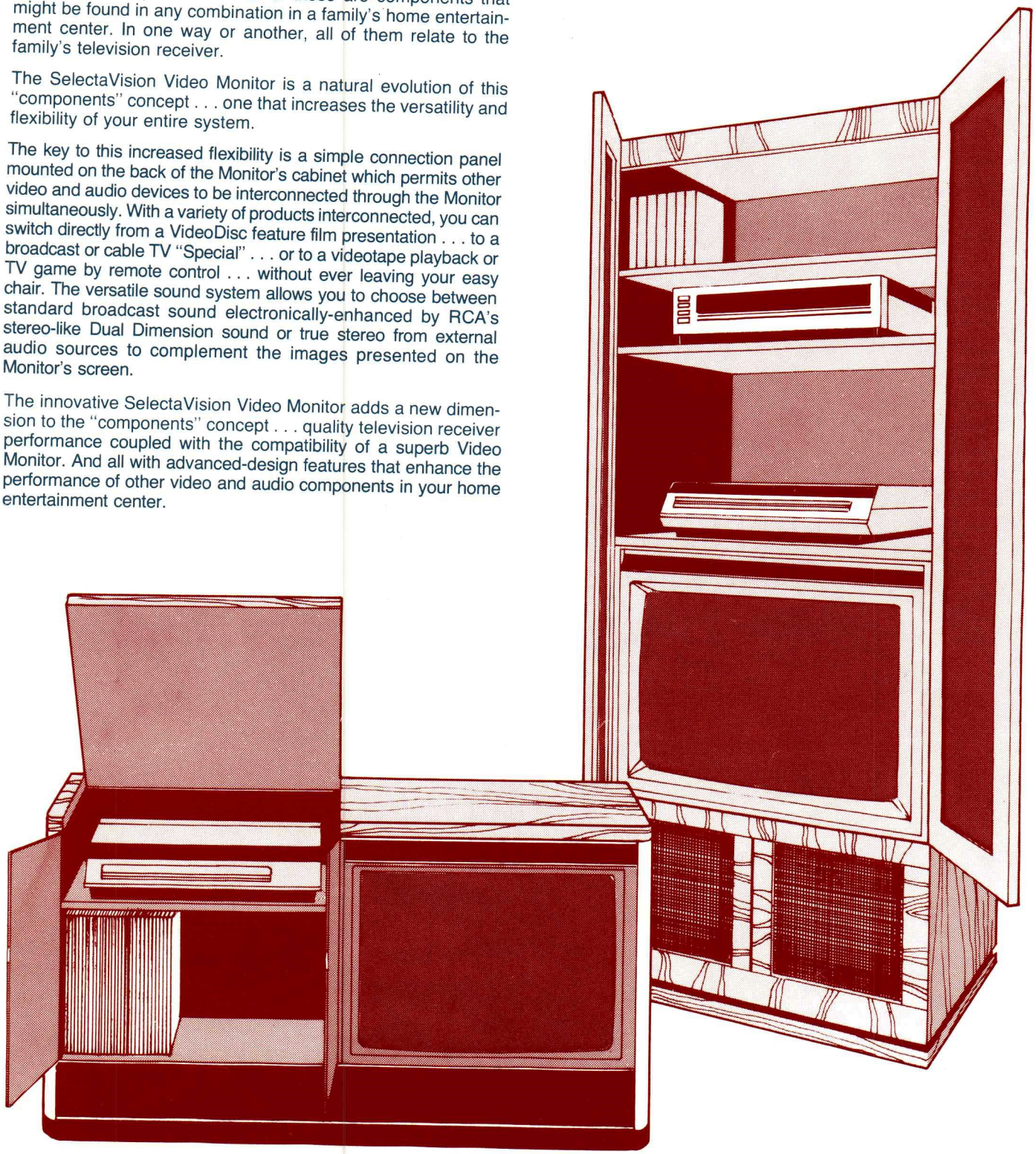
THE COMPONENTS CONCEPT

Video Cassette Recorders, VideoDisc players, TV games, audio amplifiers and speakers . . . all of these are components that might be found in any combination in a family's home entertainment center. In one way or another, all of them relate to the family's television receiver.

The SelectaVision Video Monitor is a natural evolution of this "components" concept . . . one that increases the versatility and flexibility of your entire system.

The key to this increased flexibility is a simple connection panel mounted on the back of the Monitor's cabinet which permits other video and audio devices to be interconnected through the Monitor simultaneously. With a variety of products interconnected, you can switch directly from a VideoDisc feature film presentation . . . to a broadcast or cable TV "Special" . . . or to a videotape playback or TV game by remote control . . . without ever leaving your easy chair. The versatile sound system allows you to choose between standard broadcast sound electronically-enhanced by RCA's stereo-like Dual Dimension sound or true stereo from external audio sources to complement the images presented on the Monitor's screen.

The innovative SelectaVision Video Monitor adds a new dimension to the "components" concept . . . quality television receiver performance coupled with the compatibility of a superb Video Monitor. And all with advanced-design features that enhance the performance of other video and audio components in your home entertainment center.

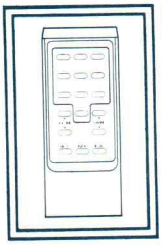


FEATURES . . . AS A RECEIVER

Operating as a receiver to reproduce standard VHF, UHF, and Cable TV broadcasts, your SelectaVision Video Monitor offers these exceptional features:

127-Channel Tuning—Your new Monitor is equipped to receive all standard VHF and UHF broadcast channels plus up to 57 Cable channels. A switch on the back of the cabinet allows you to choose either standard broadcast or Cable channels . . . with direct access to most cable channels by remote control without a converter.

On-Screen Time and Channel Display—Each time you change channels, the correct time and channel number are displayed on the receiver's screen momentarily.



Remote Control—The 17-function remote control hand unit provides "easy chair" tuning of all standard and cable channels. **Mute** button allows you to turn off the sound but not the picture during momentary interruptions such as telephone calls. The **Recall** button brings the Time and Channel display to the screen at any time.

ChanneLock Tuning—ChanneLock electronic tuning is a Frequency Synthesis system that utilizes a precision quartz crystal to generate a stable and exact frequency reference for all VHF, UHF, and Cable channels. When a channel is selected, digital control circuitry directs the tuner to the exact frequency required. No fine tuning is ever required.

Programmable "Memory"—In most areas, only a certain number of channels are available. For simplified tuning, enter into the memory only those channels you want to watch. Pressing the Channel Up/Channel Down controls will advance the tuner to the next programmed channel . . . skipping unwanted channels in between.

Detail Processor—Three separate electronic picture processing systems help provide the richly detailed and precisely accurate picture quality demanded of a high-performance receiver. Together, they provide sharp, clear picture resolution and color fidelity.

110° Super AccuFilter Picture Tube—The shorter picture tube permits a thinner cabinet profile consistent with today's decorating requirements. The increased electron beam deflection angle provides improved picture resolution and performance.

Automatic Picture Control Systems—Your SelectaVision Video Monitor utilizes all of the built-in automatic picture control and convenience features found in the acclaimed RCA ColorTrak 2000 models including:

- **Automatic Color/Fleshtone Correction** circuits which maintain color intensity and fleshtone hues to the settings you've selected. The Color Control circuitry tracks color intensity variations and electronically adjusts them to maintain consistency. Dynamic Fleshtone circuitry monitors the hue of every picture element . . . watching for and adjusting critical fleshtone errors while also maintaining the accuracy of background colors.

- **Automatic Contrast/Color Tracking** circuits allow you to adjust Contrast, Color, and Brightness with a single control. Turning the Contrast knob activates electronic tracking circuits that automatically increase Color and Brightness in proper balance.

- **Automatic Light Sensor** acts as an "electric eye" to monitor the amount of ambient light in the room. When light level changes, the Light Sensor's **Light Dependent Resistor** circuitry automatically adjusts the picture . . . brighter in a room with bright light and darker for a dimly-lit room.

- **Automatic Sharpness** circuit monitors variations in perceived picture sharpness that may occur from channel to channel. Frequently, these variations are the result of a less-than-perfect antenna or multi-channel cable system. This RCA-designed Sharpness Control system tracks sharpness variations and corrects for them . . . resulting in picture sharpness that is consistently matched to your preference.

- **BlackLock Contrast Circuit** maintains black levels and picture detail even under high Contrast conditions.

Individual controls on the Control Panel allow you to choose the Color, Tint, Contrast, Brightness and Sharpness levels you prefer. Once you've adjusted the picture to your preference, the automatic systems will constantly monitor and adjust the picture to your preference range.

Dual Dimension Sound—Separate amplifiers and speaker systems provide the richness and dimensional realism of stereo sound from monaural broadcast sources. Frequency-selective circuitry divides standard broadcast monaural sound into two electronically-enhanced audio channels. Separate side mounted 5″ High Compliance Woofers and 2″ Tweeters on table models and front mounted dual purpose High Compliance oval speakers on console models provide peak audio frequency reproduction and efficiency.

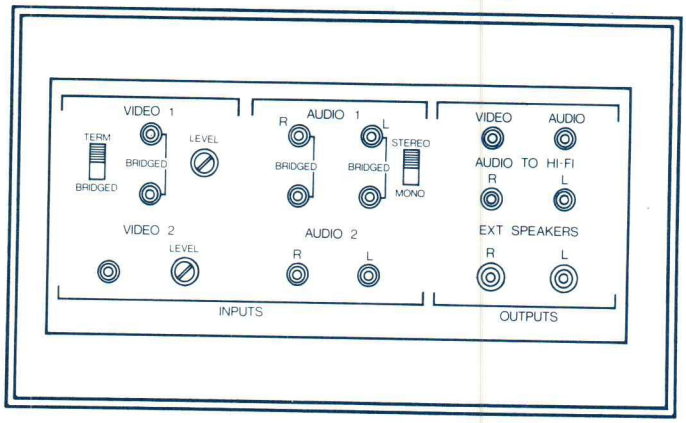
FEATURES . . . AS A MONITOR

Operating as a monitor to reproduce video and audio from external sources, the SelectaVision Video Monitor complements the performance of these devices with these additional features:

External Video/Audio Inputs— In addition to the standard antenna input, the Monitor has the built-in capability to handle multiple video/audio inputs and outputs without extensive recabling. This permits connection of several video/audio devices simultaneously to a central video display.

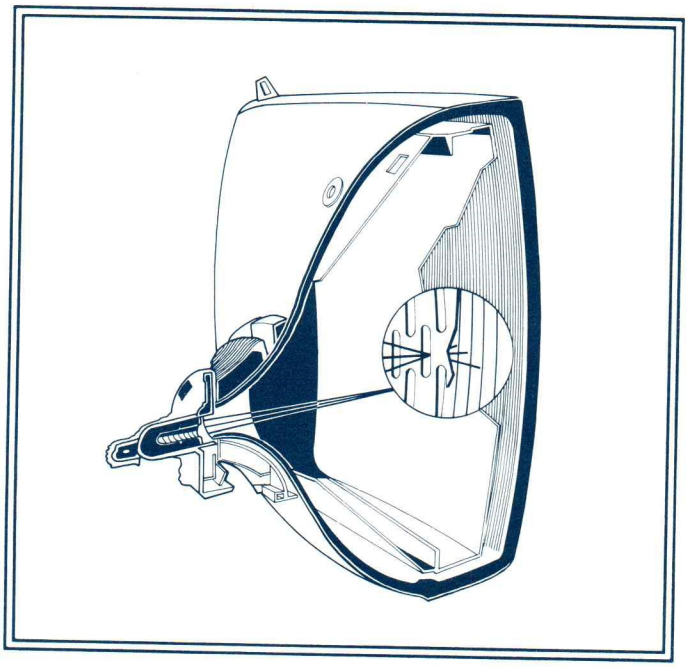
Remote Control — The **Keyboard Channel Selectors** on the remote control hand unit provide direct tuning access to external video sources. Audio volume can also be controlled remotely.

Video/Audio Interface Connection Panel — Located on the rear of the Monitor cabinet is an interface connection panel. The panel contains 15 input/output jacks for easy connection of external video/audio devices. The **Video1/Audio 1** inputs are electronically bridged so that the signal can pass through the Monitor to a second external device. The **Video and Audio Outputs** relay the same signals which are being displayed on the Monitor's screen. **Video Level** controls permit adjustment of incoming signals.

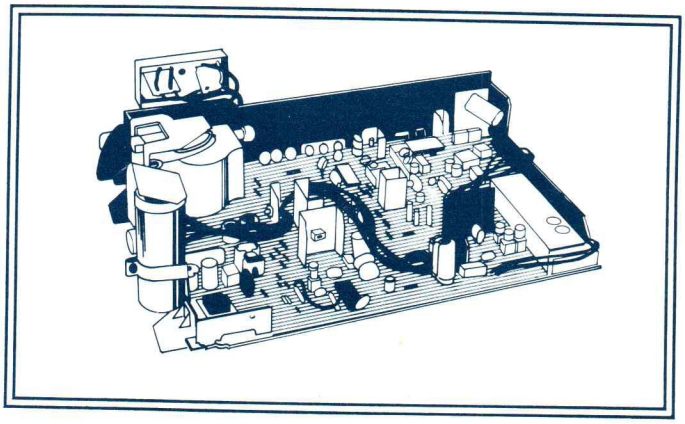


Sound System — The multiple audio inputs/outputs of the Monitor's Interface Connection circuitry permit various audio reproduction options. Since the Monitor has stereo capability (twin amplifiers and speaker systems), stereo sound from a stereo VCR or VideoDisc player can be input to the Monitor's **Left and Right Audio Inputs** for true stereo reproduction. A monaural signal from external sources can be input into the Left or Right channel of the Monitor's Audio 1 sets of internal inputs and be reproduced by both speakers. Audio 1 input also provides bridging capability so that the signal can be passed to an external audio amplification system. Additional outputs permit the connection of **External Speakers** for an expanded audio sound field.

Detail Processor—Advanced circuitry technology enhances reproduction of fine picture detail from broadcast and external sources. A solid-state CCD (Charge-couple device) **Comb Filter** separates chrominance (color) and luminance (brightness) portions of the signal for specialized processing to virtually eliminate cross-color distortions in finely-detailed images. The Filter also increases picture resolution. **Horizontal** and **Vertical Peaking** circuitry "outlines" objects and enhances picture detail to make it stand out from backgrounds. This is a distinct advantage over ordinary receivers which include only horizontal peaking. And the **Noise Coring** circuits prevent enhancement of noise and picture interference. Together, these signal processing components provide sharp, clear picture resolution and color fidelity.



110° Super AccuFilter Picture Tube — RCA-designed **Hi-potential, Bi-potential Electron Gun** provides sharper focus due to shorter electron beam travel. **Super Arched Shadow Mask** maintains uniform color purity even in demanding bright white scenes. **Tinted Phosphors** enhance picture contrast by reducing reflections of ambient room light.



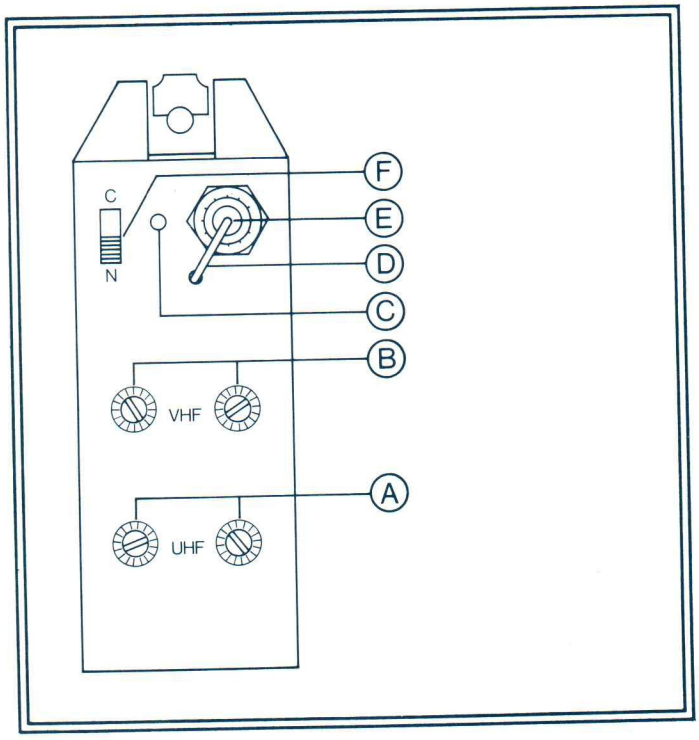
Unitized XtendedLife Chassis — The unitized chassis (all components on a single circuit board) has fewer pin-plug connections to minimize potential trouble spots. RCA's XtendedLife chassis also features **Electronic Switching Voltage Regulation** to reduce power consumption and protect vital components, a single **Micro-integrated Chroma/Luma** circuit that performs most of the active color processing functions with increased picture quality and reliability, and **Electronic Protection** circuitry that protect components during electrical surges. These advanced circuitry designs provide outstanding performance and assure chassis reliability.

INSTALLATION

The following instructions apply if you plan to connect your antenna directly to the Video Monitor. If you plan to use a tuner-equipped VCR in your entertainment center, you will need an antenna connection to the VCR as well. See Page 8 for alternate arrangements.

The Monitor's picture performance is only as good as the signal it receives. Although indoor antennas will provide satisfactory reception in some areas, we recommend using an outdoor antenna for best reception.

Below is an illustration of the antenna connection panel on the back of the Monitor cabinet. Follow the instructions for the type of antenna system you intend to use.



Indoor Antenna Connection

VHF Antenna

1. When using "rabbit ears" or any other 300 Ohm twin-lead system, connect the ends of the twin leads to the VHF screws (B).
2. Make sure the jumper pin (D) is in the 75 Ohm jack (E).
3. Adjust the length and position of the antenna rods for best reception.

UHF Antenna

1. When using a loop, ring or "bowtie" antenna, connect the twin leads to the UHF screws (A).

Cable TV Connection (round 75 Ohm coaxial cable)

1. Remove jumper pin (D) from the 75 Ohm jack (E). Store jumper pin in hole (C).
2. Attach the cable lead-in to the 75 Ohm jack (E).

Note: Cable system hook-ups vary widely . . . especially those which offer both standard cable and premium-pay channels. Consult your local Cable System installer for connection instructions. This is particularly important if you plan to use this Monitor with a Video Cassette Recorder or a VideoDisc player. Receiving the full benefit of their programming capability is dependent on the type of antenna system connections installed.

The sliding Cable/Normal switch (F) on the antenna block should be placed in the **N** (Normal) position for normal VHF/UHF antenna systems and in the **C** (Cable) position for cable system connections.

Outdoor Antenna Connection

VHF Antenna Connection (round 75 Ohm coaxial cable)

1. Remove jumper pin (D) from the 75 Ohm jack (E) and store in hole (C).
2. Attach the outdoor antenna cable lead-in to the 75 Ohm jack (E).

VHF Antenna Connection (flat 300 Ohm twin-lead cable)

1. Make sure the jumper pin (D) is inserted in the 75 Ohm jack (E).
2. Connect the VHF outdoor antenna twin-leads to the VHF screws (B).

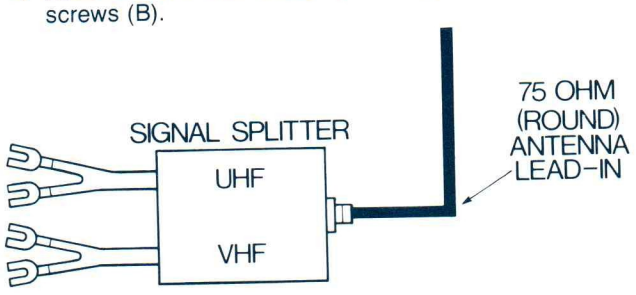
UHF Antenna Connection (flat 300 Ohm twin-lead cable)

1. Connect the UHF outside antenna twin-leads to the UHF screws (A).

VHF/UHF combination antenna connection using a signal splitter

If you do not already have one, you will need a signal splitter available from your RCA Dealer.

1. Make sure the jumper pin (D) is inserted in the 75 Ohm jack (E).
2. Attach the antenna lead-in to the signal splitter.
3. Attach the UHF twin-leads from the signal splitter to the UHF screws (A).
4. Attach the VHF twin-leads from the signal splitter to the VHF screws (B).



ANTENNA/EXTERNAL COMPONENTS

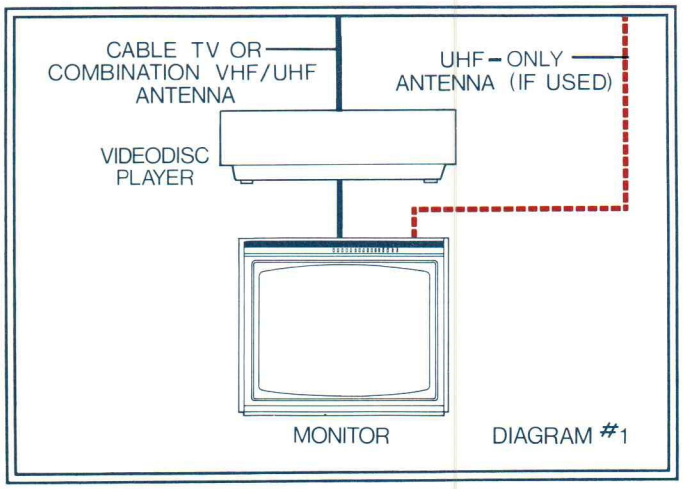
Incoming standard broadcast or cable TV signals, (commonly called "RF") are usually connected directly to the television's antenna block. In a multi-component system, other devices may also need to be connected into the antenna line. For example, tuner-equipped VCRs require signals for recording off-air programs. VideoDisc players which do not have video/audio output jacks feed their signals to the television receiver through the antenna system. For these reasons, choosing the type of antenna connection you use can be very important.

Use the following diagrams for signal flow only. The type of lead-in wires (coaxial or flat-lead), the presence of UHF channels in your area, and other considerations may dictate the exact hook-up required. **The Owner's Manuals for the individual instruments will provide more exact directions.**

Try to keep all wiring as short and direct as possible to minimize signal loss and picture interference pickup.

VideoDisc Player and Video Monitor

The arrangement in Diagram #1 is applicable if your VideoDisc player does not have Video/Audio Outputs and the program signal must be fed from the VideoDisc player to the Monitor through the antenna system. If your player has Video/Audio Outputs, see page 15.

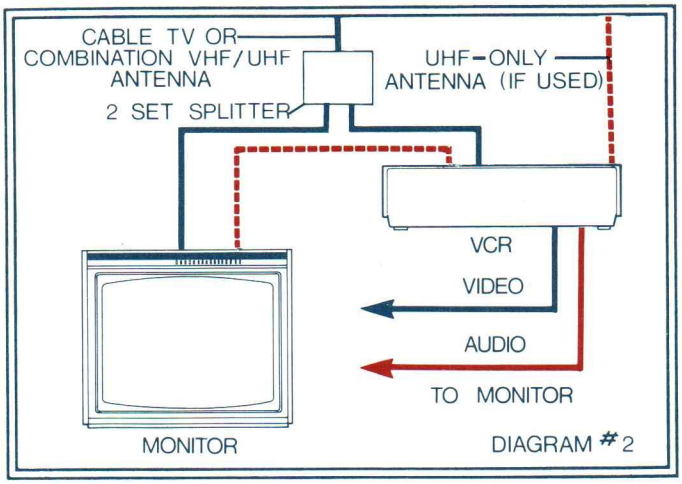


VCR and Video Monitor

Due to variations in the way different VCRs handle antenna switching, conventional routing of the VHF antenna signal through the VCR may not provide maximum flexibility. This is especially true if your VCR automatically disconnects normal antenna signals when placed in the "Play" mode. Check your Owner's Manual for antenna operation of your particular VCR.

A preferable method of interconnection (Diagram #2) uses a broadband 2-set signal splitter (sometimes called a 2-set coupler) for running separate RF antenna signal feeds to the VCR and the Monitor.

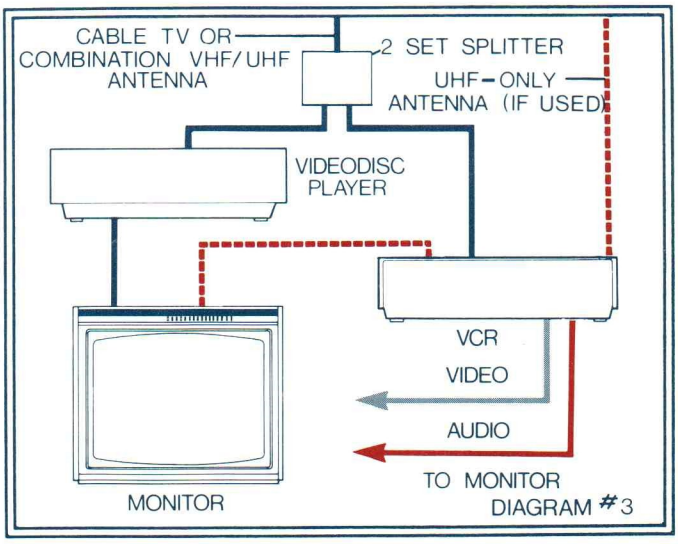
By providing separate RF feeds to the two instruments via a signal splitter, you can elect to view either off-air or videotape playback and not be concerned about the position of the VCR's TV/VCR switch.



VCR, VideoDisc Player, and Video Monitor

As in Diagram #2, this arrangement (Diagram #3) uses a 2-set signal splitter to bypass the VCR's antenna (TV/VCR) switching and therefore maintains maximum flexibility.

This arrangement is only applicable if your VideoDisc player does not have Video/Audio Outputs and must feed its signal through the antenna system to the Monitor. If your player has Video/Audio Outputs, use Diagram #2 and see Page 15 for Video/Audio hook-up.



These arrangements also provide full usage of the VCR's tuning, remote control, and programming features.

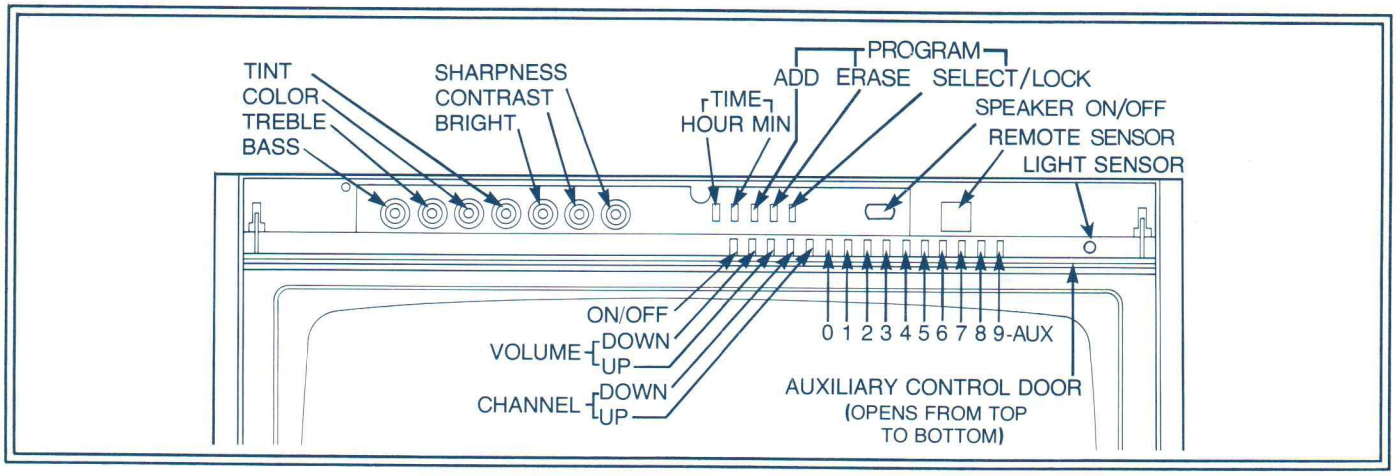
Note: Some cable companies offering premium-pay or scrambled channels may require the use of a decoder in the antenna connection system. Consult your local cable company for additional information.

LOCATION AND USE OF CONTROLS

The illustration below indicates the location and names of the Video Monitor's controls and identifies the visible components of various automatic systems. The Power, Volume, and Channel Selection controls are fully exposed; the remainder are found behind an auxiliary control door.

Many of the controls are also found on the Remote Control hand unit (See page 10).

The Monitor has been adjusted at the factory for excellent picture and sound reproduction under optimum signal reception conditions. However, you may wish to readjust the controls for local signal reception conditions and to reflect personal preference. Additional instructions for operation and adjustment of the Monitor are found on Page 11.



Bass/Treble Controls—permit separate adjustments of low and high frequency audio to your preference. In addition to the Monitor's internal audio system, the Audio to Hi-Fi, and External Speaker jacks are affected by these controls.

Picture Adjustment Controls — the individual **Color, Tint, Brightness, Contrast,** and **Sharpness** controls are all adjustable to your preference. Once you've adjusted the picture to your liking, the circuitry automatically maintains color balance to the settings you've selected.

Time Set (Hour and Minute) Controls — allow you to set the correct time for the **On-Screen Time Display.** With the Monitor turned on, press the appropriate Hour or Minute buttons to set the clock. Should a - -:- - display appear on the screen, a power outage has occurred or the Monitor has been momentarily unplugged and you'll need to reset the clock.

Programming — The **Program Add, Erase, and Select/Lock** controls permit programming the Monitor's electronic tuner memory with the channels in your area you want to watch. (See page 11 for programming instructions.)

On/Off—The On/Off button serves both **On** and **Off** functions. When the button is pressed to provide power, the Monitor will come on tuned to the last channel you watched. Pressing the button again turns the power off. Should an AC power failure occur, the Monitor's tuner will automatically select the lowest channel programmed into the tuner's memory when AC power is restored and the Monitor is turned on.

Volume Down/Volume Up — these individual controls allow you to adjust the sound to the exact volume you desire.

Channel Down/Channel Up — These additional channel selection controls permit advancing the tuner directly to the next higher or lower channel programmed into the tuner's electronic "memory". (See Page 11 for programming instructions.) If several channels are programmed into the memory, pressing either of the controls will advance the tuner sequentially through the list of pre-programmed channels . . . stopping briefly at each to let you see program content.

Channel Selector Controls — (0 through 9-Aux) Your Monitor is equipped with a 10-digit keyboard for direct access channel selection. To obtain the channel you want, two numbers must be pressed. For a channel with a single-digit number, press **0** first. For example, for Channel 8, press (0) and (8). VHF channels 10 through 13 and UHF channels 14 through 83 are selected by pressing the numbers in the correct order.

Digit button (9-Aux) also provides immediate access to either of two external video sources connected to the Monitor's Interface Connection Panel. To select the program output of a VCR connected to the **Video 1 Input,** press (9-Aux) and (1). Press (9-Aux) and (2) to select the second external sources connected to **Video 2 Input.** For external sources connected through the RF antenna system only, selection must be done with the individual **Channel Selector** controls; either Channel 3 or Channel 4 depending on their setting for each source.

All Channel Selection controls are found on both the Control Panel and on the Remote Control hand unit.

Speaker On/Off Switch- In its **ON** position, the Monitor's internal speakers or any external speakers connected to the Monitor's External Speaker jacks will function normally during Monitor use. In its **OFF** position, neither the internal or external speakers will function. The **OFF** position is used when the sound is being reproduced by an external amplifier/speaker system fed from the **Audio to Hi-Fi** jacks.

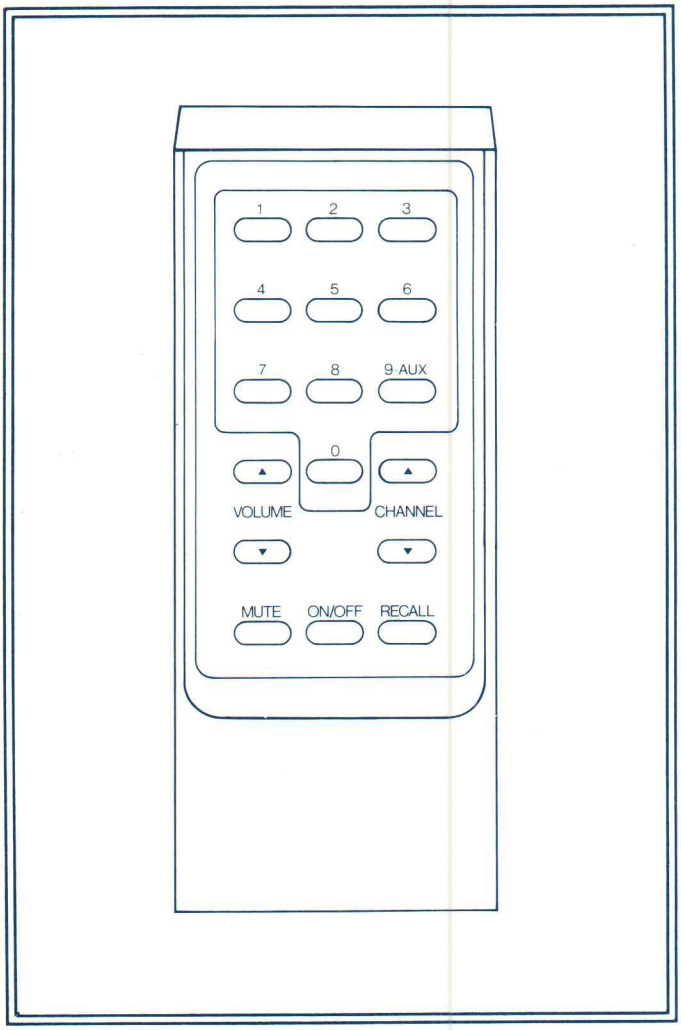
Remote Sensor—This electronic "window" receives the signals from the Remote Control hand unit.

Light Sensor — This automatic "eye" monitors ambient room light and electronically readjusts the picture to compensate for changes. The picture will automatically be brighter in a well-lit room and darker in a room with dim light. The Light Sensor is not adjustable.

REMOTE CONTROL

Your SelectaVision Video Monitor features RCA's 17-function Infrared Remote Control system which uses an invisible beam of digitally-encoded infrared light to activate the Monitor's power, channel selection and volume controls. Unlike earlier ultrasonic remote control systems, RCA's Infrared system is not susceptible to activation by common household noises, ringing phones, or neighborhood transmitters.

Each time the Monitor is turned on or you change channels, the correct time and channel number will appear on screen momentarily. (See page 9 for clock set instructions)



On/Off—This button serves as both an **ON** and **OFF** control. Press once to turn on the Monitor; press again to turn it off.

Mute—Press the Mute button to turn off the Monitor's sound but not the picture. This is especially useful during telephone calls or other momentary interruptions. Pressing the button again will instantly restore the sound at its original level.

Recall—The On-Screen Time and Channel display can be recalled to the screen at any time by pressing the Recall button. The display will automatically disappear in about four seconds.

Channel Selection

Select channels using either the **Channel Up (▲) or Channel Down (▼)** buttons or by pressing the individual keyboard channel selector buttons. When the Channel Up or Channel Down button is pressed, the tuner will advance directly to the next higher or lower channel you've programmed into the tuner's memory. If you hold down one of the buttons, the tuner will advance sequentially through all of the programmed channels . . . stopping briefly at each one so that you can see program content.

Pressing the individual **Channel Selector** keyboard buttons will advance the tuner directly to the channel you wish. When using the keyboard to select channels, remember to press two numbers. For example, press 0 and 6 for Channel 6. For Channel 13, press 1 and 3.

Auxiliary Channel Selection

Access to the program output of video devices connected to the Monitor's Interface Connection Panel is accomplished by pressing the appropriate keyboard **Channel Selector** buttons. Press (9-Aux) and (1) for the device (VCR, VideoDisc player, or other) connected to the Video 1 input. For the Video 2 input, press (9-Aux) and (2).(These auxiliary channels cannot be programmed into the tuner's memory and, therefore, cannot be selected with the Channel Up/Channel Down controls.)

Volume Control

Press the **Volume Up** (▲) or **Volume Down** (▼) buttons to increase/decrease the volume. When volume is decreased to a low level, an automatic **Loudness Compensation** circuit in the sound system automatically boosts the Treble and Bass responses so that audio highs and lows aren't completely lost.

The Volume Up/Volume Down controls also affect the volume levels of speakers attached to the **External Speaker** jacks or to instruments connected to the **Audio to Hi-Fi** outputs.

Battery Replacement

Should your remote control hand unit become inoperative, you may need to check or replace the battery. For replacement, use a NEDA-type 1604 9-volt battery.

To replace:

1. Turn the hand unit face down.
2. Press down on the arrow on the battery cover and slide the cover to the rear of the unit.
3. Remove the battery clip. Insert the replacement battery into the terminals.
4. Slip battery into case.
5. Slide battery cover into place.

OPERATION AND ADJUSTMENTS

How to adjust for the best picture and sound

The picture has been adjusted by the factory under optimum signal reception conditions. However, conditions may not be the same in your area. After turning on the Monitor, allow it to warm up for a few minutes. If the picture is not to your liking, make these adjustments.

a. Turn the **Color** and **Contrast** controls to the left as far as they will go.
b. Turn the **Brightness** control left or right until black parts of the picture appear black.
c. Turn the **Contrast** control to the right until the picture is to your preference.
d. Turn the **Color** control to the right until you reach a pleasing level of intensity.
e. Adjust the **Tint** control until fleshtones and other colors appear natural.
f. Adjust the **Sharpness** control for a pleasing level of picture detail and sharpness.
g. With the Volume control set at a normal level, adjust the **Treble** and **Bass** controls to your preference.

Once these adjustments have been made and the picture is to your liking, the automatic picture control system will maintain the levels and color balance you've selected. On the back of the Monitor cabinet is the Automatic Color switch (A/C) which allows you to turn the Automatic Color System on or off.

Adjustments for external video sources

When using external video sources with your Monitor, the video input levels can be adjusted using the **Video Input Level** controls on the rear Connection Panel (diagram on Page 13).

Due to standardization of video signal levels, the controls can usually be left in a fully clockwise position. If you notice significant variations in picture contrast level between standard broadcast and external video sources, adjust the appropriate **Video 1** or **Video 2** level controls to obtain a better match.

PROGRAMMING THE TUNER'S MEMORY

A special programming circuit in the tuning system allows you to program into the receiver's memory those channels you prefer to watch. Then, by pressing the **Channel Up** or **Channel Down** button, the tuner will advance directly to the next programmed channel . . . automatically skipping the unwanted ones.

Several channels have been programmed at the factory. To reprogram the tuner, follow the instructions below in the exact order shown.

Preparation:

1. **For Cable TV** only: read about Cable TV in special Cable instructions (See Page 12).
2. **For television other than cable:** decide which VHF and UHF channels you wish to program.
3. Turn on the receiver and set the volume at a normal level.

Eliminating Unwanted Channels:

1. Press either the **Channel Up** or **Channel Down** button until an unwanted channel is tuned.
2. Press and hold the **Select/Lock** button with one hand and press the **Erase** button with your free hand. The sound will turn off indicating that the channel has been erased from the memory.
3. Release the **Select/Lock** button and repeat Steps 1 and 2 until all unwanted channels have been erased.

Adding Desired Channels:

1. Using the individual **Channel Selector** buttons, select the channel you desire to program.

   Note: The auxiliary channels, (9-Aux/1 and 9-Aux/2) cannot be programmed into the memory.
2. Press and hold the **Select/Lock** button and press the **Add** button with your free hand. The sound will come on indicating that the channel has been programmed into the memory. Release the **Select/Lock** button.
3. Repeat Steps 1 and 2 until all desired channels have been programmed.
   Only the desired channels should now be programmed into the memory.

Normal Viewing:

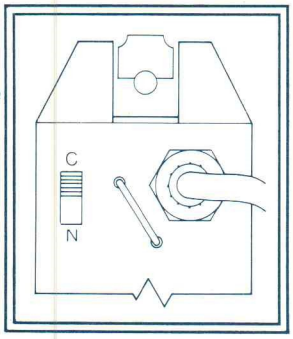
Press the **Channel Up** or **Channel Down** buttons on either the receiver's control panel or on the remote control hand unit. The tuner should now advance directly to the channels you've programmed into the memory. Of course, you can still use the individual **Channel Selector** buttons to change channels if you so desire.

You can continue to **Add** or **Erase** channels from the memory using this simplified procedure:

1. Select the channel you wish to program.
2. Press and hold the **Select/Lock** button and press **Add** to program the channel . . . or press **Erase** to delete it from the memory.
3. The presence of sound will indicate the channel has been added; the absence of sound will indicate that it has been erased.

CABLE TV OPERATION

In addition to normal broadcast reception, your Video Monitor is equipped to receive up to 57 cable channels. To use the Monitor on a Cable TV system, place the Cable/Normal Switch (located on the antenna block on the back of the cabinet) in the **Cable** (**C**) position. When shipped from the factory, this switch is in the **Normal (N)** position.



Select cable TV programs on channels 2 through 13 in the usual manner. Select additional cable channels, refer to the following chart and tune the indicated channel numbers.

Not all cable TV channels will be active in your particular system. Also, some cable companies may not utilize the numbering system listed on the chart. Consult your local cable company for complete information.

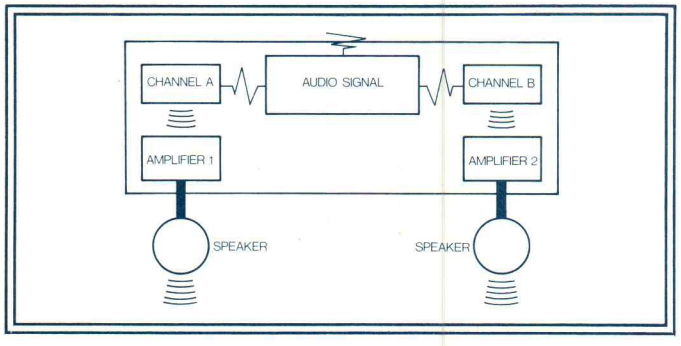
*For Canadian CATV operation, see separate instruction sheet.

To receive cable channel	A-5	A-4	A-3	A-2	A-1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
Tune your set to channel	69	70	71	72	73	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36

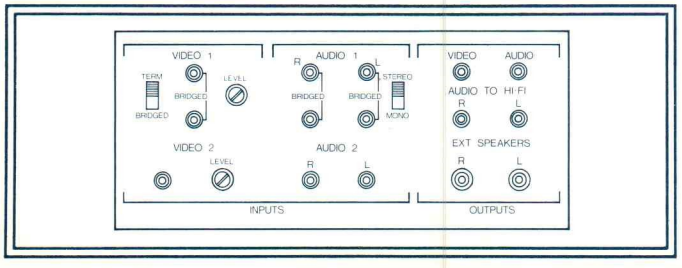
To receive cable channel	W-1	W-2	W-3	W-4	W-5	W-6	W-7	W-8	W-9	W-10	W-11	W-12	W-13	W-14	W-15	W-16	W-17
Tune your set to channel	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53

STEREO/DUAL DIMENSION SOUND

Although all current television programs are broadcast with monaural sound, your Video Monitor contains advance-design Dual Dimension audio circuitry and components for improved TV sound with the ambient realism and dimensional qualities of stereo. Frequency-selective processing circuits divide monaural TV sound into separate channels which are electronically enhanced to generate audio signals composed of five distinct frequency bands. These signals, passed to separate amplifiers and symmetrical side-mounted speakers, provide greatly improved audio frequency response even at higher-than-average volume levels.



When connected to an external stereo audio source such as a stereo VCR or VideoDisc player, the Monitor's audio system produces true stereo sound.



Audio Inputs — Both the Audio 1 and Audio 2 Inputs have Left and Right jacks for connection of stereo external audio sources. A single-lead monaural source such as a VCR can be connected to either the Left or Right Input of Audio 1 and, when the Mono-Stereo switch is in the **Mono** position, the monaural signal will be produced through both sets of internal speakers.

The Audio 2 Input is "stereo only" and does not have a Mono/Stereo switch. You can use a Y-connector (available at electronic supply companies) to connect a single-lead monaural source to both the Left and Right Audio 2 Inputs. The monaural signal will then be reproduced by both sets of internal speakers.

Two-lead stereo sources connected to the Left and Right Audio 1 or Audio 2 Inputs will provide true stereo reproduction.

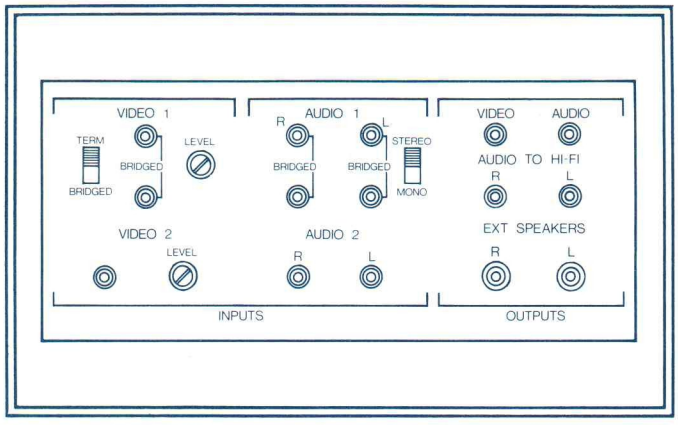
The **Audio 1 Inputs** are bridged to permit feeding an external audio source into and through the Monitor to an external amplification system or to a second Monitor. The **Audio 2 Inputs** do not have bridging capability.

Three sets of Audio Outputs provide additional reproduction flexibility. The **Audio Output** jack provides a monaural composite signal of any program being displayed on the Monitor's screen. This signal can be connected to the Audio Inputs of a VCR or external amplification system. The **Audio to Hi-Fi** jacks deliver a two-channel signal of the program being displayed on the Monitor's screen for connection to an external stereo amplifier or to another stereo recording device. The Monitor's **Volume, Mute,** and **Bass/Treble** controls affect the Audio to Hi-Fi output. The **External Speaker** jacks provide signals suitable for connection to most external speaker systems. When external speakers are plugged in, the Monitor's internal speakers are muted. All speakers, internal and external, are muted when the **Front Panel Speaker** switch is in the **OFF** position.

CONNECTING EXTERNAL COMPONENTS

The Interface Connection Panel

This Connection Panel contains various video/audio input/output connections, switches, and adjustments and can be used to connect external video/audio sources to the Monitor for display or to pass video/audio signals to other external equipment.

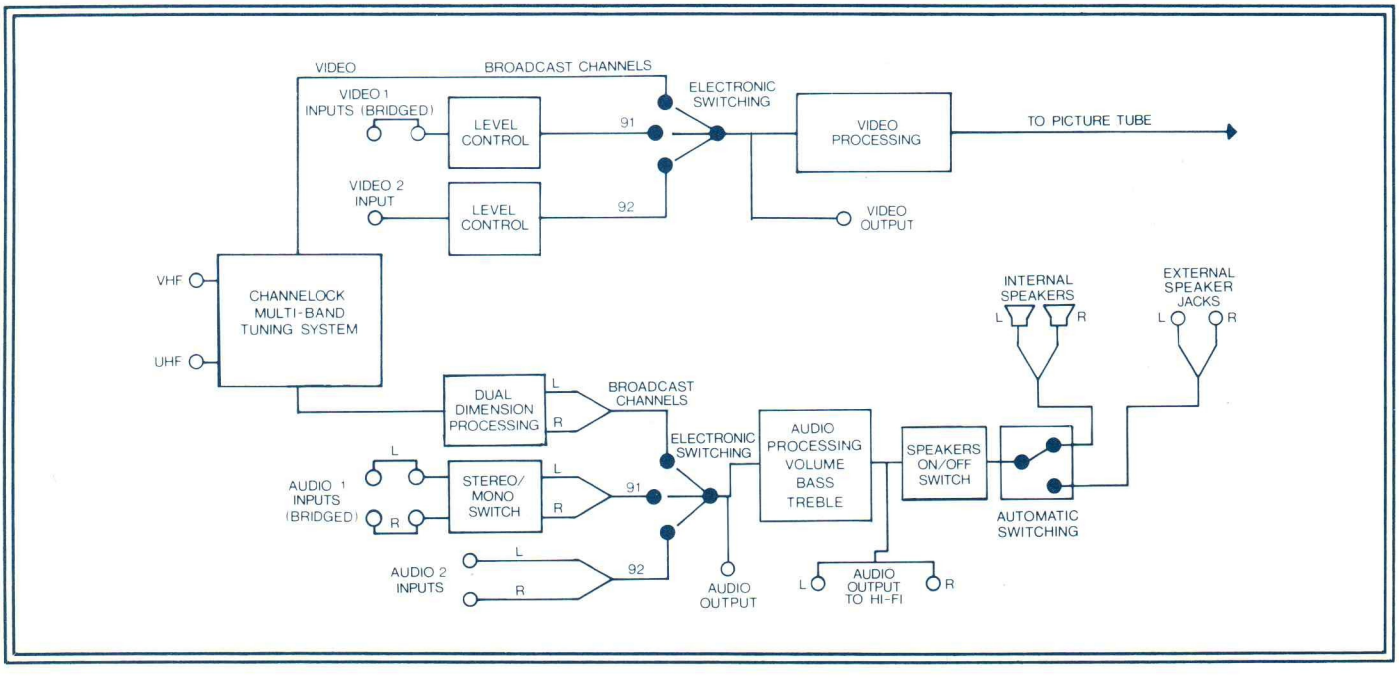


1. **Termination/Bridging Switch** — The **Term** position provides proper termination of the incoming signal for best picture reproduction. The **Bridge** position eliminates termination and allows loop-through of the incoming video signal to another Monitor or to a VCR.
2. **Video 1 Input, Bridged** — has bridging capability via a contiguous connector to allow feeding a video signal into the Monitor for display and back out to a video recorder or to another Monitor. This is very useful when editing or dubbing program video tapes.
3. **Video 1 Input Level** — adjusts the incoming video level from an external source connected to the Video 1 Input. Due to standardization of American Standard (NTSC) video sources, adjustment is seldom required and the control can be left in the full clockwise position.
4. **Audio 1 Input, Bridged** — Used in conjunction with Video 1 Input, Bridged.
5. **Mono-Stereo Switch** — Because the Audio 1 Input might be used for monaural sound sources such as a VCR, a Mono-Stereo switch has been included which allows a single monaural audio source (fed into either of the dual inputs) to be played through both of the Monitor's speakers.
6. **Video/Audio Outputs** — These outputs relay the same program signals which are displayed on the Monitor's screen.
7. **Audio to Hi-Fi Outputs** — These jacks can be used in the event a stereo audio output is desired for feeding an external stereo amplifier.
   The Monitor's Volume, Mute, Bass, and Treble controls affect these outputs.
8. **External Speaker Outputs** — Used to connect one or more external speakers to the Monitor's audio system. When external speakers are plugged in, the Monitor's internal speakers are muted.
9. **Audio 2 Inputs** — For connection of a second audio source used in conjunction with the Video 2 Input.
10. **Video 2 Input Level** — Used to adjust the level of the video signal connected to the Video 2 Input.
11. **Video 2 Input** — For direct connection of a second video source. This input does not have bridging capability.

Together, these connection jacks, switches, and level controls permit a wide variety of video/audio products to be interconnected with minimum recabling.

Signal Flow

The diagram below illustrates the basic audio and video circuitry within the Monitor and indicates the signal flow of the various video features.



VIDEO/AUDIO CONNECTIONS

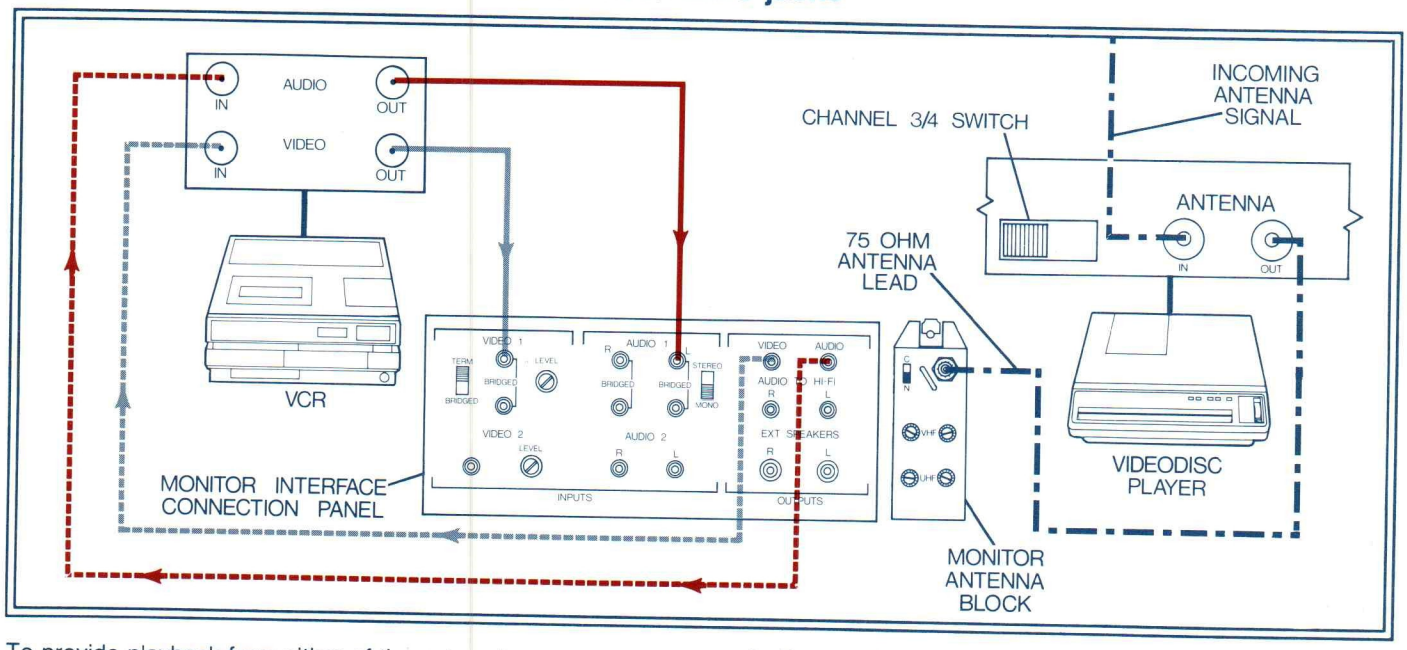
The exact arrangement you use to interconnect various video and audio components to your Video Monitor is dependent on the model and features of each component. Check the Owner's Manuals for each component for the location of video and audio imputs and outputs.

The following connection diagrams are offered as suggestions. However, you may need to modify them to accommodate your particular assortment of components and features.

Most video/audio connections between components can be made with cables which have RCA-type phono connectors. Additional cables are available from your RCA dealer or electronic supply company.

Note: The Video 2/Audio 2 Inputs may be substituted for the Video 1/Audio 1 Inputs in all of the following directions with the exception of those requiring bridging. Only Video 1/Audio 1 Inputs provide bridging capability.

Monitor + VCR + VideoDisc without Video/Audio jacks



To provide playback from either of the external sources:

1. Connect Video Out of VCR to Video 1 Input of Monitor.
2. Connect Audio Out of VCR to Audio 1 Input of Monitor. (For Monaural VCR, connect Audio Output to the Left Input and place Mono/Stereo switch in Mono position. For stereo VCRs, connect both Left and Right Inputs and place Mono/Stereo switch in Stereo position.)
3. Place Termination/Bridging Switch in **Term** position.
4. With 75 Ohm coaxial cable, connect Antenna Out of VideoDisc player to the 75 Ohm Antenna connection on the Monitor's antenna block.
5. Place the VideoDisc player's Channel 3/4 switch in the position most appropriate for your viewing area (Channel 3 if there is no Channel 3 broadcasting in your area).

Operation

The output from either component can now be selected for display on the Monitor. Select (9-Aux) and (1) to display the program from the VCR. Select Channel 3 to display the program output from the VideoDisc player.

To record off-air or cable programs being displayed on the Monitor's screen (dotted lines):

1. Connect the Video and Audio Output jacks of the Monitor to the Video and Audio Input jacks of the VCR (Consult VCR Owner's Manual).
2. Place VCR's Camera/Tuner Input Selector Switch in the **Camera** position.

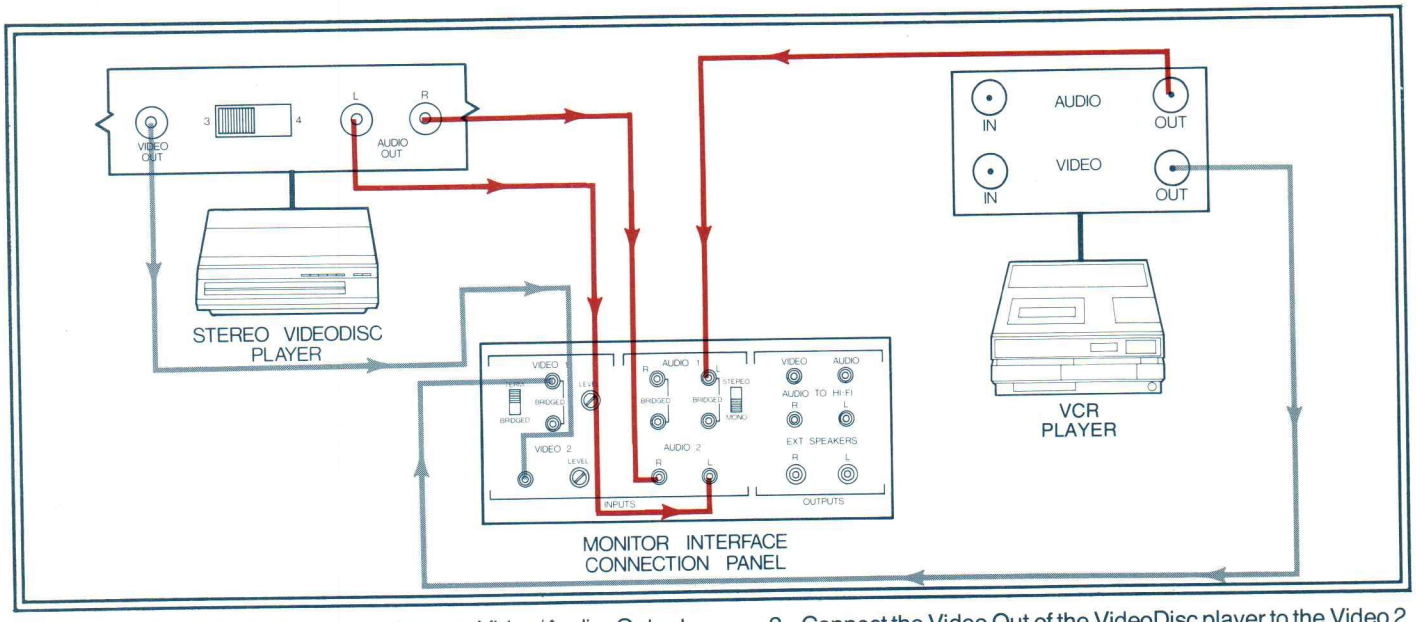
   Note: Do not change channels on the Monitor during recording when using this arrangement since it will interrupt the program signal being recorded.

It is recommended that the lead cables connected to the Monitor's Connection Panel be dressed to either side of the instrument's back cover to avoid hum pickup. Two cable guides are mounted on the left side of the rear cabinet panel on table models. These can be bent out and away from the panel and used to dress the cables.

Caution: the unauthorized recording of television programs and other materials may infringe on the rights of others.

VIDEO/AUDIO CONNECTIONS

Monitor + VCR + Stereo VideoDisc



All Stereo VideoDisc players also feature Video/Audio Output jacks. For playback from either video source:

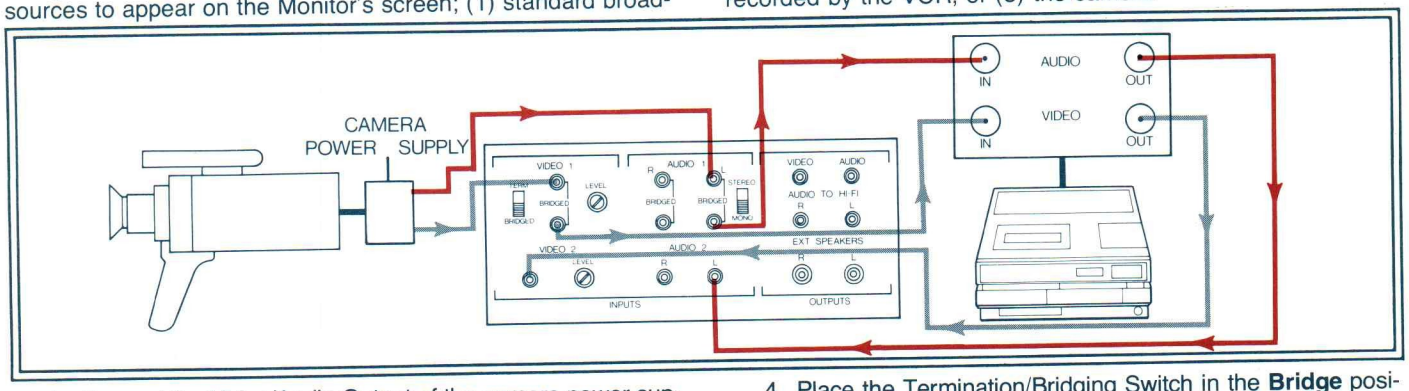
1. Connect the Video/Audio output jacks of the VCR to the Video/Audio/Input jacks of the Monitor. (For Monaural VCR, connect Audio Output to the Left Input and place Mono/Stereo switch in **Mono** position. For stereo VCRs, connect both Left and Right Inputs and place Mono/Stereo switch in **Stereo** position.)
2. Connect the Video Out of the VideoDisc player to the Video 2 Input of the Monitor.
3. Connect the Left and Right Audio Output jacks of the VideoDisc player to the Left and Right Audio 2 Input jacks.

Operation

The output of either video component can now be selected on the Monitor's screen. Press (9-Aux) and (1) to display the program output of the VCR. Press (9-Aux) and (2) to display the output from the VideoDisc player.

Monitor + VCR + Camera

Using this connection arrangement, you can select any of three sources to appear on the Monitor's screen; (1) standard broadcast, (2) program playback from a VCR or the program being recorded by the VCR, or (3) the camera.



1. Connect the Video/Audio Output of the camera power supply to the Video 1/Audio 1 Inputs of the Monitor. (Use Left Audio 1 jack.)
2. Connect the Video/Audio Outputs of the VCR to the Video 2/Audio 2 inputs of the Monitor. This will produce audio on one channel of the Monitor. If desired, a Y-connector (available at most electronic supply stores) can be used to provide a monaural audio signal from a single cable to the Left and Right Monitor Inputs.
3. Connect the Monitor's Bridged Video/Audio connectors to the Video/Audio Inputs of the VCR.
4. Place the Termination/Bridging Switch in the **Bridge** position.

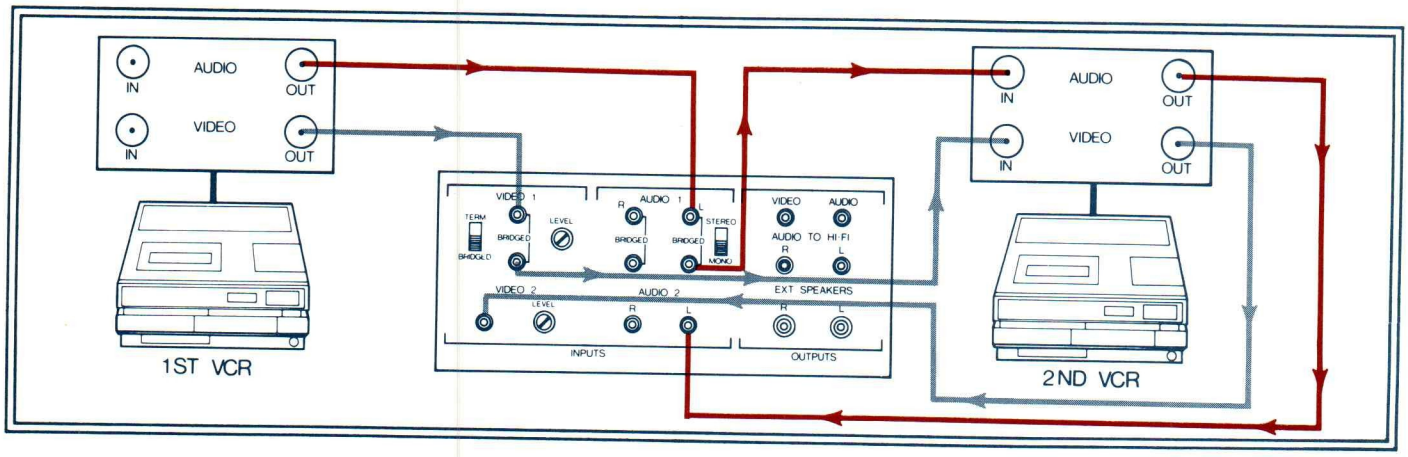
Operation

Select the output of the camera by pressing (9-Aux) and (1) . . . either on the Monitor's Control Panel or by remote control. Select the output from the VCR by pressing (9-Aux) and (2). The Monitor will display either what is being recorded by the VCR or what is being played back. By placing the VCR's Tuner/Camera switch in the **Camera** position, the VCR can record the signal from the camera. Normal channel selection will display standard broadcast programming on the Monitor's screen.

VIDEO/AUDIO CONNECTIONS

Dubbing/Editing programs with 2 VCRs

Should you wish to dub material from one VCR to another, the connections can be made through the Monitor to provide monitoring capability during the dubbing process. The bridging feature of the Monitor allows you to view other off-air broadcasts while the dubbing is in process.



1. Connect the first VCR's Video/Audio Out jacks to the Video 1/Audio 1 Inputs of the Monitor. (For a Monaural VCR, connect Audio Output to the Left Input and place Mono/Stereo switch in Mono position. For stereo VCRs, connect both Left and Right Inputs and place Mono/Stereo switch in **Stereo** position.)
2. Connect the other Video 1/Audio 1 jacks on the Monitor to the second VCR's Video/Audio Input jacks. (If the second VCR is monaural, use the Left Audio jack and place the Monitor's Mono/Stereo switch in the **Mono** position regardless of whether the first VCR is stereo or mono. If the second VCR is stereo, connect both Left and Right jacks on the Monitor to the Left and Right Audio Inputs on the VCR. The placement of the Mono/Stereo switch is then dependent on whether the first VCR is mono or stereo.)
3. Connect the Video/Audio Outputs of the second VCR to the Video 2/Audio 2 Inputs on the Monitor. (If this is a monaural VCR, obtain a "Y" connector—available from most electronic supply stores—to provide a monaural audio signal to both the left and right channels on the Monitor. If the VCR is stereo, directly connect the VCR's Left and Right Audio Outputs to the Monitor's Left and Right Audio 2 Inputs.)
4. Make sure the Termination/Bridging switch on the Monitor is in the **Bridge** position.
5. Place the second VCR's Camera/Tuner Input switch in the **Camera** position.

Operation

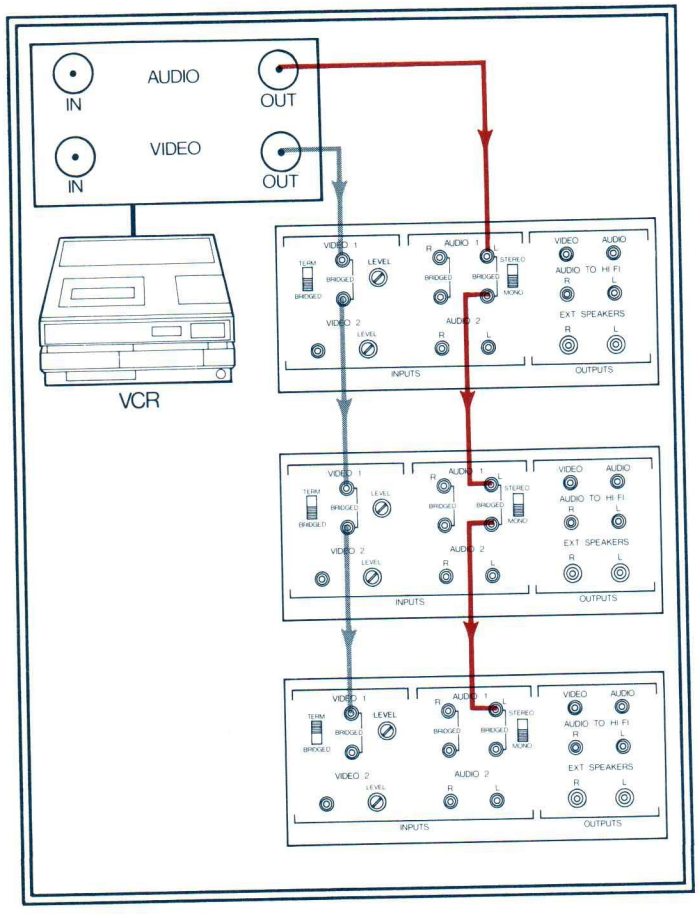
VCR #1 should now be used to play the tape to be copied. VCR #2 should be used for recording.

Program material can now be dubbed to the second VCR. You can monitor the program material being played on VCR #1 by pressing (9-Aux) and (1). To see the output of VCR #2, press (9-Aux) and (2). If you choose to edit the material, you can delete portions of the program by using the **Pause Control** of VCR #2. (See VCR Owner's Manual)

VIDEO/AUDIO CONNECTIONS

Bridging signal to several monitors

One video/audio source such as a VCR can be connected to several Monitors in series to provide several displays from a single component.



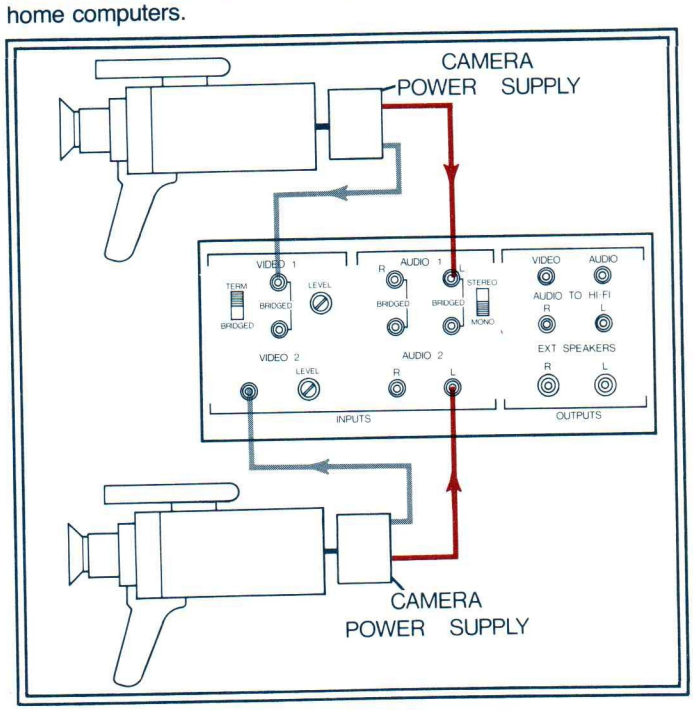
1. Connect the VCR's Video Output jack to one of the Video 1 Input jacks of the first Monitor in the series.
2. Connect the VCR's Audio Output jack to one of the Audio 1 Input jacks of the first Monitor in the series. If the original source is **Mono,** connect only one audio cable; if stereo, connect audio cables to both the Left and Right audio inputs of the Monitor and place the Mono/Stereo switch in the **Stereo** position.
3. Connect cables from the other Video 1/Audio 1 jacks to the Video 1/Audio 1 Input jacks on Monitor #2.
4. Continue to connect pairs of Video 1 and Audio 1 Inputs until you have as many Monitors in the series as you desire. The recommended number of Monitors in the series should not exceed 10 to avoid video/audio degradation.
5. The last Monitor in the series is the "terminating" Monitor. The Termination/Bridging switch on this Monitor must be set in the **Term** position. The switches on all other Monitors in the series must be placed in the **Bridge** position.

Operation

The video and audio signals from the VCR will now appear on all of the Monitors in the series when each Monitor is tuned to (9-Aux) and (1). Audio levels can be set individually as required. The Video 1 Input Level can also be adjusted on each Monitor, if required, to match the video level of the picture on each of the Monitors.

Surveillance Systems

The Video Monitor can be used in home or business as a surveillance system to monitor the output of one or two video cameras (black and white or color). The diagram below can also be used to connect additional video-related products such as TV games or home computers.



1. Connect the output from the Power Supply of the first camera to the Video 1 and Audio 1 Input jacks of the Monitor. This will produce audio on one channel of the Monitor. If desired, a **Y-connector** (available at most electronic supply stores) can be used to provide a monaural audio signal from a single cable to the Left and Right Monitor inputs. Place the Mono/Stereo switch in the **Mono** position.
2. Connect the Video/Audio Output from the Power Supply of the second camera (or TV game, etc) to the Video 2 and Audio 2 Inputs of the Monitor.
3. Make sure the Termination/Bridging switch is in the **Term** position.

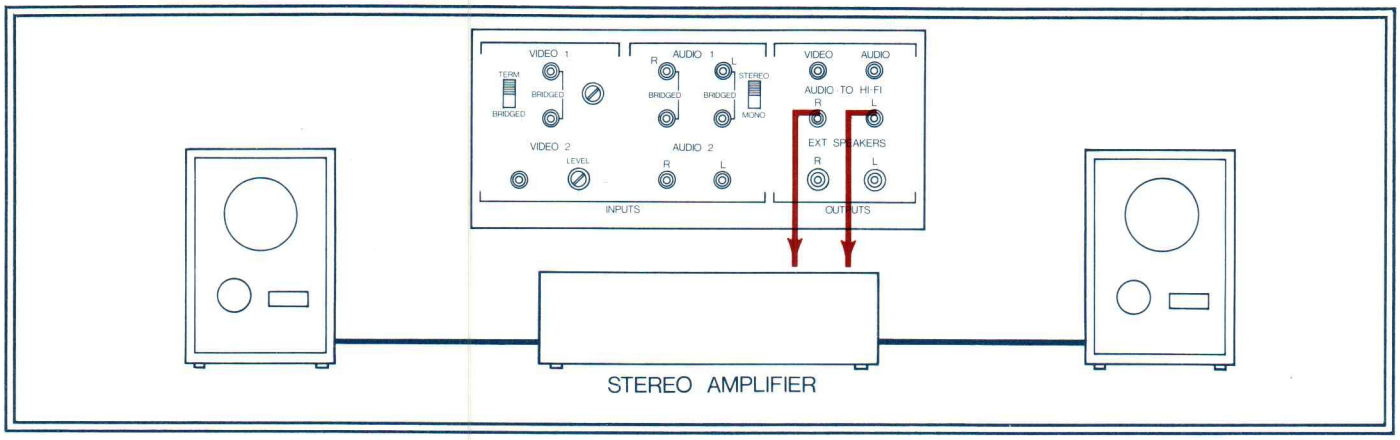
Operation

If two cameras are used in the system (for example, cameras positioned in various areas of a business or home), you can use the **Auxiliary** input access capability on either the Monitor or the Remote Control Hand Unit to select which camera output you want displayed on the screen.

VIDEO/AUDIO CONNECTIONS

Connecting an External Amplifier

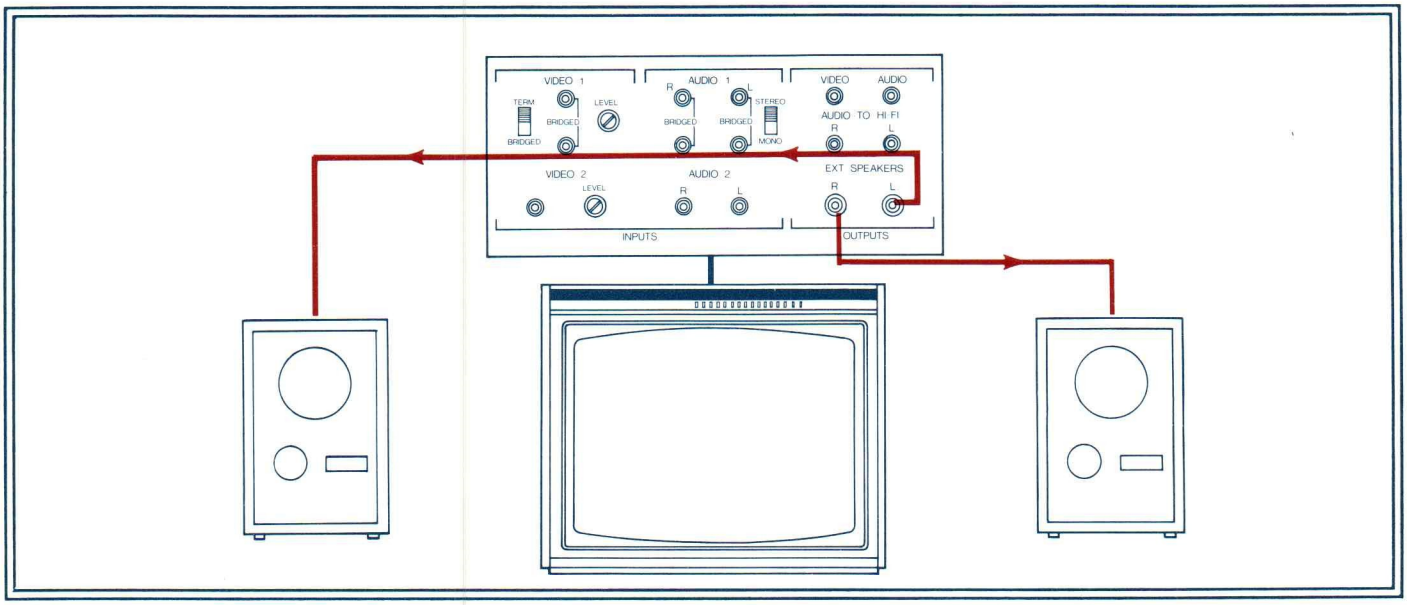
The **Audio to Hi-Fi** Outputs can be used to feed a stereo audio output to an external stereo amplifier or audio tape recorder. These jacks relay the audio signal from whatever program is being displayed on the Monitor's screen. For example, if a stereo VideoDisc program is being displayed, the stereo sound will be available at these jacks. If off-air or cable channels are being displayed, the output of the Monitor's Dual Dimension sound is available at these jacks and can be fed to an external amplifier to increase the stereo-like effect.



1. Using RCA phono jack cables, connect one lead from each of the Audio to Hi-Fi jacks of the Monitor to the Audio Input jacks of the stereo amplifier.
2. Adjust volume on the Monitor for a moderate listening level.
3. Set the Monitor's On/Off Speaker switch to the OFF position.
4. Adjust the external audio amplifier's Volume control for a moderate listening level.
5. Control of the audio can now be done using the Volume, Mute, Bass, and Treble controls on the Monitor's Control Panel or the remote control hand unit.

Connecting External Speakers

The Monitor's Interface Connection Panel contains Left and Right External Speaker jacks. These are standard ¼'' phone jacks. Plugging in External speakers automatically mutes the Monitor's internal speakers.



1. Connect standard speaker cables with ¼'' phone plugs from the Monitor's External Speaker jacks to Left and Right Speakers.

The Monitor's built-in amplifiers are designed to drive high efficiency speakers of approximately 8-Ohms impedance. Other types of speakers may cause variations in the amount of available volume capability but will not harm the Monitor's amplifier.

COMMON SENSE PRECAUTIONS

All functional operating controls and their functions are identified and explained in this Manual. For warranty service or routine maintenance, contact the nearest RCA Authorized Servicenter. All servicing and adjustments of electrical components should be done by a qualified service technician.

To keep your Video Monitor operating in peak condition and to obtain optimum performance:

- Choose a location that is convenient for viewing but does not subject the Monitor to extreme heat such as full sunlight, heat registers, or radiators.
- Allow for air circulation at the bottom, top, and back of the Monitor. Cleaning the ventilation slots on the bottom, top, and back of the cabinet at regular intervals will assure adequate ventilation.
- Try to avoid direct light on the screen during operation. Since the picture tube emits light, any direct room light striking the screen will diminish picture quality and intensity.
- Marking of the picture tube resulting from the use of a TV game is not a set defect and is not covered by RCA's Limited Warranty.

For models which feature the Contrast Enhancement Filter (dark glass over Monitor screen), the filter is removeable for cleaning. To remove, hold the Filter in place and remove the black retainer thumb screws which attach the Filter to the Monitor. Allow it to tilt out and away from the screen. Then lift the Filter out of its retaining channel.

To clean, flush the surface with cool water to remove the dust. Then wash in a solution of one capful of dishwashing detergent to a pint of lukewarm water. Rinse clean and dry with a soft cloth. To obtain a long-lasting clean and dust-free surface, wash the front of the screen again with a General Purpose Anti-static Solution and dry with a clean, lint-free cloth.

DESIGN SPECIFICATIONS

Design Specifications:

Color Standard: 525 Line NTSC Color
Chassis: CTC121, solid state, unitized
Power Requirements: 120VAC ± 10%, 60 Hz.
Power Consumption: 114W Av., 137 W. Max.

Mechanical Specifications

Picture Tube: 25'' (diagonal) 110° Precision In-Line with High Potential, Bipotential gun, Super Arched Shadow Mask and striped, pigmented phosphors

Models VGM 2022 and 2023
Height: 21¾''
Width: 25¼''
Depth: VGM 2022 — $18^{3}/_{16}$''; VGM 2023 — $18^{11}/_{16}$''
Shipping Weight: 90 lb.

VGM 2079
Height: $30^{3}/_{16}$''
Width: 49¼''
Depth: 20¼''
Weight 200 lb.

VGM 2080
Height: $71^{5}/_{8}$''
Width: 27''
Depth: $21^{5}/_{16}$''
Weight 325 lb.

Remote Control System

Transmission system: Digitally encoded infrared light
Functions: 17 Buttons including:
Keyboard Direct Access Channel Selection (0-9)
Channel Scan Up/Down (Programmable)
Volume Up/Down
Volume Mute
Recall of On-Screen Channel & Time Display
Power
Access to Aux. Inputs: Keyboard selection of 91 (Aux. 1), 92 (Aux. 2)
Battery: 9 Volt NEDA type 1604
Battery Life: 1 yr. in normal use

Electrical Design Specifications

RF Specifications
Tuning System Type: Multiband Frequency Synthesis
Band coverage: VHF 2-6, 7-13
Midband (A-5) - I
Superband J - W
Hyperband (W+1) - (W+17)
UHF 14 - 83
Frequency Coverage: 54 - 402 MHz, 470 - 890 MHz.
Tuner Type: Solid State Varactor
Channel Access: Direct Access Keyboard, Programmable Scan Up/Down
Channel Indicator: On-Screen Display of Channel Number & Time
Antenna Input: VHF - 75/300 Ohms, UHF - 300 Ohms
Sensitivity: VHF 1.14 pW, UHF 3.0 pW
Off-set Channel Pull-In Range: + 1.5MHz, −2.0 MHz. (single channel)

Video Specifications
Luminance Resolution: Greater than 350 lines
Black-to-White Risetime: 54.0 ns. (RF in, max. peaking)
Luminance Resolution: Greater than 350 lines
Video Output: 1 V PP, 75 Ohms
Chroma Bandwidth: −4 dB max. @ ± 500 KHz
H. V @ Zero Beam current: 27.2 KV, nom.
Max. Brightness - Full Screen: 71 Ft.−L.
- Peak: 360 Ft.−L.

Audio Specifications
Frequency Response: 50 - 15,000 Hz.
Audio Output Levels —Audio to Hi-fi jacks: 1.3 V, RMS max. (volume controlled), 600 Ohms impedance
—Audio Output jack: 75 mV RMS max., 600 Ohms impedance
Audio Input: 960 mV RMS max., 7400 Ohms impedance
Speaker types:
VGM 2022 and 2023 — (2 ea.) 5'' High Compliance Woofer, 2'' Tweeter
VGM 2079 — (2) 5'' × 7'' High Compliance
VGM 2080 — (2) 6'' × 9'' High Compliance
Speaker impedance — internal: 16 Ohms, nom.
external: 6 Ohms or greater

All specifications subject to change without notice.

TROUBLESHOOTING

Sometimes a performance problem can be easily solved by checking seemingly apparent but often overlooked possibilities.

Before arranging for service by your RCA Authorized Servicenter, check these items. It could save you time and money.

If you're having this kind of trouble:	Check these things:	Then make these adjustments:
No picture or sound	Be sure unit is plugged in. Check wall power switch. Make sure you've tuned an active channel. Check antenna connections. Check Cable/Normal switch.	
Sound OK; poor picture	Try another channel (station trouble). Check antenna connections. May be local interference. Check interconnection cabling.	Adjust picture controls Connect incoming antenna directly to Monitor if it has been connected to other source
Picture OK; poor sound	Try another channel. If using external audio devices, check connections.	Adjust Volume, Bass, Treble controls.
Picture OK; no sound	Make sure speaker On/Off Switch is in ON Position.	
Poor reception of broadcast channels	Check antenna connections. Check Cable/Normal switch. Try another channel. If VCR is connected into system, check position of VCR/TV switch. If VideoDisc Player is connected, be sure it is turned off.	Adjust Sharpness control
Poor reception from external video sources	Check VCR/TV switch. Check Termination/Bridging switch. Check all connections per instructions. Try another program (Tape or Disc problem).	Isolate the problem by connecting only one video source to Monitor with either antenna or Video/Audio connectors.
Poor sound fed to external speakers or amplifiers	Check all connections	Adjust Volume, Bass, Treble controls at all sources.
Remote Control doesn't work	Check batteries	
Cannot tune desired channels via remote control	Try tuning channels with on-set Channel Selectors. Check batteries in hand unit.	Add or delete channels from the tuner's memory.

Isolating potential problem areas:

With the multiplicity of interconnections that could exist in a home entertainment center, it can be helpful to connect the components to the Monitor individually, one at a time, to help isolate the problem area. With the incoming antenna lead connected directly to the Monitor's antenna block, you can check the Monitor for broadcast or cable reception and normal operation. Then, connecting the VCR to the Monitor . . . either by coaxial antenna cable or the VCR's Video/Audio Inputs/Outputs . . . will help identify any VCR operational malfunctions. The Antenna Connection instructions in this Manual along with the VCR Owner's Manual will assist you in making the necessary connections and operational checks. Similarly, you can check the operation of your VideoDisc player or audio components.

Other items which could impair the operation of the various components include faulty or incorrect cabling, signal path problems which result from errors in the connection of cabling, and in incorrect setting of various switches. Should a problem occur, an inexpensive first step is to re-read all of the Owner's Manual information relating to the type of problem you're encountering. If you do determine that the Monitor is experiencing an operational or functional problem, contact your nearest RCA Authorized Servicenter.

REFERENCE NOTES

If you are installing your new Monitor in a multi-component entertainment center, you may wish to use this page to diagram the antenna and video/audio interconnections between components. This can be particularly helpful should you need to unhook any of the connections temporarily.

AN IMPORTANT UPDATE TO YOUR RCA SELECTAVISION VIDEO MONITOR OWNER'S MANUAL. Please read and use the "Updated Information and Instructions" in the right-hand column of this sheet in place of the corresponding "Owner's Manual Information and Instructions" in the left-hand column.

OWNER'S MANUAL INFORMATION AND INSTRUCTIONS	UPDATED INFORMATION AND INSTRUCTIONS
Page 14, Right-Hand Column, First Paragraph: Most video/audio connections between components can be made with cables which have RCA-type phono connectors. Additional cables are available from your RCA dealer or electronic supply company.	Most video/audio connections between components can be made with shielded cables that have RCA-type phono connectors. For best performance, video cables should use 75 ohm coaxial shielded wire. Cables are available from your RCA dealer or electronic supply company.
Page 17, Left-Hand Column, Step 4: 4. Continue to connect pairs of Video 1 and Audio 1 Inputs until you have as many Monitors in the series as you desire. The recommended number of Monitors in the series should not exceed 10 to avoid video/audio degradation.	Continue to connect pairs of Video 1 and Audio 1 Inputs until you have as many Monitors in the series as you desire. Some slight degradation of picture quality may be noticed as units are connected in this manner.
Page 17, Right-Hand Column, Steps 1 & 2: 1. Connect the output from the Power/Supply of the first camera to the Video 1 and Audio 1 Input jacks of the Monitor. This will produce audio on one channel of the Monitor. If desired, a Y-connector available at most electronic supply stores can be used to provide a monaural audio signal from a signal cable to the Left and Right Monitor inputs. Place the Mono/Stereo switch in the **Mono** position. 2. Connect the Video/Audio Output from the Power Supply of the second camera (or TV game, etc.) to the Video 2 and Audio 2 Inputs of the Monitor.	1. Connect the output from the Power Supply of the first camera to the Video 1 and Audio 1 Input jacks of the Monitor. Place the Mono/Stereo switch in the **Mono** position. 2. Connect the Video/Audio Output from the Power supply of the second camera to the Video 2 and Audio 2 Inputs of the Monitor. This will produce audio from one channel of the Monitor. If audio from both channels is desired, a **Y-connector** (available at most electronic supply stores) can be used to provide a monaural audio signal from a single cable to the Left and Right Monitor inputs.
Page 19, Under "Video Specifications" Heading: Luminance Resolution: Greater than 350 lines	Luminance Bandwidth: 4.2mHz (limit)

YOUR RCA LIMITED WARRANTY

RCA Corporation warrants that if anything goes wrong with your SelectaVision Video Monitor within 90 days—and it's our fault—we will pay any RCA Authorized Servicenter only for the labor to repair it in your home, or if required, in the Servicenter. After the 90-day labor warranty expires, all labor charges are your responsibility.

In addition, we will make available at no charge to the RCA Authorized Servicenter new or, at our option, rebuilt replacements for parts of your set that become defective within these time periods; picture tube, two years; all other parts, one year.

This warranty excludes: sets purchased or serviced outside the U.S.A.,* sets altered or incorporated into other products; sets which have been rented; all costs arising from installation, external antenna systems, and adjustments of user controls; damage due to misuse or neglect and any costs for initial technical adjustments (set-up). Consult the operating instructions included with your set for information regarding antennas and user controls.

For the names and locations of RCA Authorized Servicenters in your locality, contact any RCA television dealer or distributor or refer to the yellow pages of your telephone directory.

To obtain warranty service, you must:

1. Contact an RCA Authorized Servicenter and request the needed repairs.
2. When repairs are completed, present your RCA warranty registration or bill of sale or other evidence of the date on which the set was first purchased.

You will find it easier to obtain warranty service if you have your warranty registration, so be sure that you receive your registration from the dealer from whom you buy the set, and keep it where you can find it if needed.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

*For purchases in Canada refer to Canadian Warranty.

RCA Corporation
Consumer Electronics Division
600 North Sherman Drive
Indianapolis, Indiana 46201

Si un livret d'instructions en français n'est pas inclus avec votre appareil, vous pouvez en obtenir un (INDIQUER LE NUMERO DE MODELE, VOTRE NOM ET VOTRE ADRESSE) en vous adressant a:

RCA Inc.
Service des donnees techniques
5575 av. Royalmount
Ville Mont-Royal, Quebec, Canada
H4P 1J8

Marca(s) Registrada(s)
Trademark(s) ® Registered
Printed in U.S.A.

Part #2816031-1

RCA